

North Pacific Marine Science Organization (PICES)

Basic Instrument

Convention for a North Pacific Marine Science Organization (PICES)

Implementing Legislation

No implementing legislation: self-executing treaty; under the general authority of the Secretary of State.

Member Nations

Canada, Japan, People's Republic of China, Republic of Korea, Russian Federation, and the United States of America.

Organization Headquarters

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U.S. Representation

A. Appointment Process

The United States is represented on the PICES Governing Council by two delegates appointed by the Secretary of State in consultation with interested agencies and institutions: one from a major Federal Government research agency and one from a research university or other academic institution. The United States is represented on the Scientific Committees and Working Groups created by the Governing Council by individuals appointed by the U.S. delegates with the authorization of the Secretary of State and in consultation with interested agencies and institutions.

B. U.S. Delegates:

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Description

A. Mission/Purpose:

The PICES area is defined by the Convention as the temperate and sub-Arctic region of the North Pacific Ocean and its adjacent seas, especially northward from 30 North Latitude. Activities of the organization may, for scientific reasons, extend farther southward in the North Pacific Ocean.

The primary role of PICES is to promote and coordinate marine research undertaken by the Parties in the Convention Area; advance scientific knowledge about the ocean environment, global weather and climate change, living resources and their ecosystems, and the impacts of human activities; and promote the collection and rapid exchange of scientific information on these issues. PICES provides an international forum to promote greater understanding of the biological and oceanographic processes of the North Pacific Ocean and its role in the global environment.

B. Organizational Structure:

PICES is comprised of (1) a Governing Council, (2) a Science Board, (3) such permanent or *ad hoc* scientific groups and committees as the Governing Council may from time to time establish, and (4) a Secretariat.

Governing Council: The Governing Council oversees the administration and science activities of the organization, including the Rules of Procedure and Financial Regulations; amendments to the Convention; adoption of the annual report of the organization; the annual budget and financial accounts of the organization; appointment of the Executive Secretary; contact with other international organizations; and management of the overall activities of the organization. The Finance and Administration Committee (F&A) reports directly to the Governing Council.

Science Board: The Science Board identifies research priorities and problems pertaining to the Convention Area and appropriate methods for their solution; recommends coordinated research programs and related activities pertaining to the Convention Area through the national efforts of the participating Contracting Parties; promotes and facilitates the exchange of scientific data, information and personnel; considers requests to develop scientific advice pertaining to the Convention Area; organizes scientific symposia and other scientific events; and fosters the discussion of

problems of mutual scientific interest. The Science Board also oversees the activities of the four scientific committees, the technical committee, and the scientific program. Its membership includes an overall chairman, as well as the chairmen from each of the six scientific committees.

Committees:

- MEQ - Marine Environmental Quality;
- BIO - Biological Oceanography;
- FIS - Fisheries Science;
- POC - Physical Oceanography and Climate;
- TCODE – Technical Committee on Data Exchange;
- MONITOR – Technical Committee on Monitoring.

Working Groups: A Working Group is a group of experts that is established with specific terms of reference, by Council, based on the recommendation of Science Board. Most Working Groups report to parent Scientific Committees, others directly to Science Board. Most Working Groups meet annually to undertake specific tasks within their terms of reference. Science Board suggests the members of Working Groups in consultation with the PICES Chairman, and seeks Contracting Parties' approval and support.

Active PICES Working Groups are:

- WG-21: Working Group on "Non-indigenous Aquatic Species" (2006 – 2013); Final report to be delivered in 2014.
- WG-26: Working Group on Jellyfish Blooms around the North Pacific Rim: Causes and Consequences (Oct. 2010-2013). Final report will be submitted in 2015.
- WG-27: Working Group on North Pacific Climate Variability and Change (Jun. 2011-Dec. 2015).
- WG-28: Working Group on Development of Ecosystem Indicators to Characterize Ecosystem Responses to Multiple Stressors (Jun. 2011-2015).
- WG-29: Working Group on Regional Climate Modeling (Jan. 2011-Dec. 2015).
- [WG-30](#): Working Group on Assessment of Marine Environmental Quality of Radiation around the North Pacific (Aug. 2013-2016).
- [WG-31](#): Working Group on Emerging Topics in Marine Pollution (Jan. 2014-2016).
- [WG-32](#): Working Group on Biodiversity of Biogenic Habitats (Jan. 2015-2017).
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Science Programs

Scientific Programs are established by PICES to address major scientific questions of general interest to the Organization. Typically, they will require significant resources and energy of the Organization for periods of up to a decade.

- FUTURE: Forecasting and Understanding Trends, Uncertainty and Responses of the North Pacific Ecosystem was established in October 2009.

Sections

A "Section" represents a sub-committee under a Scientific Committee that has a longer lifespan than a Working Group. Its purpose is to provide input to the parent Scientific Committee on specific issues for which expertise may be lacking on the parent committee. Sections should be reviewed periodically to ensure they continue to meet their objectives.

Currently PICES has the following Sections:

- S-CCME: Section on *Climate Change Effects on Marine Ecosystems* (Jan. 2012–Dec. 2017)
- S-HD: Section on *Human Dimensions of Marine Systems* (Jan. 2012–Dec. 2017)

- S-HAB: Section on *Ecology of Harmful Algal Blooms in the North Pacific* (Oct. 2003–Dec. 2017)
- S-CC: Section on *Carbon and Climate* (Oct. 2005–Dec. 2016)

Study Group

The purpose of a Study Group is to analyze the scientific, policy, and/or financial implications of a proposal made by Science Board or Governing Council, and provide recommendations for Science Board or Council on the proposal. This type of group would typically be formed for a period of one-year and would provide a report of their findings and recommendations to Science Board or Council prior to the Annual Meeting after it was formed.

Active Study Groups:

- [SG-SEES](#): Socio-Ecological-Environmental Systems (Jan. 2014-Dec. 2015).
- [SG-SCOOP](#): Joint PICES-NOWPAP Study Group on Scientific Cooperation in the North Pacific Ocean (Jul. 2014-fall 2015).
- [SG-NPESR](#): Study Group on North Pacific Ecosystem Status Report (Jan. 2015-Oct. 2016).

Advisory Panels

The purpose of an Advisory Panel is to provide scientific expertise to a Committee or Scientific Program to aid in accomplishment of a research issue or program of work that requires specific technical expertise, such as the design of an ocean experiment or sampling program, or the incorporation of certain scientific emphases (e.g. marine mammal and bird experts) into the PICES scientific scope. Most Advisory Panels report to parent Scientific Committees or Programs and meet annually to undertake specific tasks within their terms of reference.

Active Advisory Panels:

- [CREAMS-AP](#): Advisory Panel for a CREAMS/PICES Program in East Asian Marginal Seas (Oct 2005–Dec 2019)
- [MBM-AP](#): Advisory Panel on *Marine Birds and Mammals* (Oct 1999–Dec 2019)
- [AP-NPCOOS](#): Advisory Panel on North Pacific Coastal Ocean Observing Systems (Oct. 2015-).

Task Teams

Currently, there are no active Task Teams.

Recent Activities

The 2014 PICES Annual Meeting was held October 15 – 26 in Yeosu, Korea on the topic of “Toward a better understanding of the North Pacific: Reflecting on the past and steering for the future.” Information of other meetings, symposia and workshops held in 2014 can be found at the PICES website: <http://pices.int/meetings/>

Forthcoming activities, including those co-sponsored with other organizations, include:

Year	Date	Type	Location	Title	Sponsors
2015	Feb 25-26	Japan Tsunami Debris Project Co-chairmen meeting	Sidney, BC	Second Project Co-chairmen Meeting	MoE/PICES
2015	Mar 1-3	FUTURE SSC Meeting	San Diego, CA, USA	FUTURE Scientific Steering Committee Meeting	PICES
2015	March	PICES/MAFF Site Visit	Las Lisas, Guatamala	Visit to conduct social survey that addresses “ <i>Sato-umi in developing nations</i> ”.	PICES/MAFF

Part III: Scientific Organizations and Councils
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				Collaborate with Guatemalan experts to expand economic potential (shellfish aquaculture) thereby bringing greater well-being to coastal communities. (under PICES/MAFF project on “ <i>Marine ecosystem health and human well-being</i> ”)	
2015	Mar 16-18	Japan Tsunami Debris Project Science Team Meeting	Honolulu, HI, USA	Second PICES/MoE Project Science Team Meeting	MoE/PICES
2015	Mar 21-27	Symposium	Santos, Brazil	Effects of Climate Change on the World’s Oceans	PICES, ICES, IOC, IOUSP, CAPES, FUNDESPA, CNPq, FAPESP, IAEA/OA-ICC, IMBER, ITAU, MEC, NOAA, NPRB, SCOR, SOLAS
2015	May 17-19	Symposium	Kobe, Japan	Pacific Salmon and Steelhead Production in a Changing Climate: Past, Present and Future	NPAFC, FRA/Japan, Gordon and Berry Moore Foundation, Hokkaido Salmon Propagation Association, Pacific Seafood Processors Association, PSF, NPRB, PICES
2015	May 18-20	PICES Inter-session Science Board Meeting	Busan, Korea	Science Board-General oversight of the scientific interest of Council and its scientific work and research.	PICES, Korea (MOF/KIOST)
2015	May 19-22	Symposium	Gothenberg, Sweden	Harmful Algal Blooms and Climate Change	PICES, FORMAS, GEOHAB, SMHI, SCOR, IOC, ICES
2015	July 7-10	Scientific Conference	Paris, France	“Our common future under climate change”; PICES is cosponsoring a session titled, “ <i>Transformative pathways to sustain marine ecosystems and their services under climate change</i> ”	Future Earth, ICSU, UNESCO
2015	July	Joint PICES-ISC Study Group workshop	Honolulu, HI, USA	First meeting of PICES-ISC Study Group to develop a framework of cooperation between the two organizations for shared topics of interest in the North Pacific	ISC: International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean
2015	Aug 10-12	ICES-PICES S-CCME Workshop	Seattle, WA, USA	ICES/PICES S-CCME Workshop on “ <i>Modelling the Effects of Climate Change on Fish and Fisheries</i> ”	PICES, ICES, Norwegian Research Council, NOAA-NMFS,

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2015	Sep 21-25	Joint Theme Sessions 2015	Copenhagen, Denmark	ICES/PICES Theme Sessions at the 2015 ICES Annual Science Conference: –Session C “ <i>Ecosystem monitoring in practice</i> ” – Session G: “ <i>Managing marine ecosystem services in a changing climate</i> ” –Session H: “ <i>Ocean acidification: understanding chemical, biological and biochemical responses in marine ecosystems</i> ”	NOAA-CPO ICES, PICES
2015	Oct 14-25	Annual Meeting	Qingdao, China	2015 PICES Annual Meeting under the theme “ <i>Change and Sustainability of the North Pacific</i> ”	PICES
2016	Jan 26-29	Scientific Conference 2016	Sydney, Australia	9 th International Conference on Marine Bioinvasions.	PICES, , Australian Agencies
2016	May 9-13	Symposium 2016	Bergen, Norway	6 th International Zooplankton Production Symposium: <i>New Challenges in a Changing Ocean</i>	PICES, ICES, IMR-Norway
2016	May 30-June 3	Symposium 2016	Brest, France	Symposium on “ <i>Understanding marine socio-ecological systems: including the human dimension in integrated ecosystem assessments.</i> ”	ICES, PICES, NOAA, CSIRO,

Budgetary Matters

The contracting parties are assessed approximately \$125,800 annually.

Appointments and Elections

Governing Council

Dr. Carmel Lowe (Canada) to replace Mr. Robin Brown as the national delegate of Canada;
Dr. Arran McPherson (Canada) to replace Mr. David Gillis as the national delegate of Canada;
Mr. Noritsuga Takahashi (Japan) to replace Mr. Yoshiaki Takahashi as the national delegate of Japan;
Dr. Haiwen Zhang (PR China) to replace Dr. Zhanhai Zhang as the national delegate of PR China
Dr. Fangli Qiao (PR China) to replace Mr. Lifeng Cui as the national delegate of PR China

F&A Committee

Ms. Darlene Smith (Canada) to replace Mr. Robin Brown as the Canadian member
Dr. Michael Seki (USA) to replace Dr. Patricia Livingston as a US member
Ms. Lisa Phelps (USA) to replace Ms. Elizabeth Tirpak as a US member
Dr. Ken Mori (Japan) to replace Mr. Hiroyuki Shimada as a Japan member
Ms. Dongmei Tang (PR China) to replace Ms. Jing An as a PR China member
Ms. Rui Zheng (PR China) to replace Mr. Xiaobing Liu as a PR China member

Science Board

Dr. Phillip Mundy stepped down from Science Board following the disbandment of AP-SOFE.

Committees

No changes.

Subsidiary Expert Groups

Dr. Tsuneo Ono (Japan) was approved as the Co-Chairman of the Section on *Carbon and Climate* (S-CC) to replace the late Dr. Toshiro Saino (Japan);

Dr. Shin-ichi Ito (Japan) was approved as the PICES Co-Chairman of the PICES/ICES Section (Strategic Initiative) on *Climate Change Effects on Marine Ecosystems* (S-CCME) to replace Dr. Suam Kim (PICES/Korea).

Scientific Program

Scientific Programs are established by PICES to address major scientific questions of general interest to the Organization. Typically, they will require significant resources and energy of the Organization for periods of up to a decade.

The current scientific program is FUTURE: Forecasting and Understanding Trends, Uncertainty and Responses to the North Pacific Marine Ecosystems. This program was established on October, 2009.

The Governance structure of FUTURE was reorganized from three Advisory Panels to a Scientific Steering Committee (SSC) following recommendations from a mid-term review of PICES-FUTURE. Thirteen scientists (3 from Japan and 2 from each other contracting party) were nominated to the SSC. Dr. Hiroaki Saito (Japan) and Dr. Stephen Bograd (USA) were nominated and approved as co-chairs of FUTURE SSC.

Future PICES Scientific Conferences

See above table of forthcoming activities for a list of conferences and meetings.

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